

## **IN THE CLAIMS**

The following is a listing of the claims in the application with all of the claims 1-39, shown as currently amended and new dependent claims 40-56 added.

### **LISTING OF CLAIMS**

1. (currently amended) Method for matching a number N of data reception equipment (2) with a number M of external security modules (6, 8), each reception equipment (2) being provided with a unique identifier, and each external security module (6, 8) having a unique identifier, method characterised in that it comprises a configuration phase comprising the following steps:

memorising memorizing all list of identifiers of reception equipment (2) equipment in each data external security module (6, 8),

memorising memorizing a list of identifiers of external security module (6, 8) modules in each reception equipment (2),

~~and a check phase consisting of authorising access to data if the identifier of an external security module (6, 8) connected to a reception equipment (2) is present in the list memorised in this reception equipment (2), and if the identifier of said reception equipment (2) is present in the list memorised in said external security module (6, 8), otherwise disturbing access to said data~~  
and carrying out a check phase when an external security module is connected to a data reception equipment, comprising the following steps:

verifying whether or not the identifier for said external security module is present in the list of identifiers memorized in said reception equipment, and whether or not the identifier for said reception equipment is present in the list of identifiers memorized in said external security module,

and if so, authorizing access to data using said external security module and said reception equipment.

and if not, preventing access to the distributed data by means of said external security module with said reception equipment.

2. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the configuration is used implemented only when the user connects an external security module (6, 8) to a reception equipment (2).

3. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the method also comprises a step in which the operator transmits ~~a signal~~ to the reception equipment (2) to manage the check phase comprising ~~at least one,~~ one of the following set values:

- activating the check phase at ~~a programmed date~~ 5 or after a programmed delay,
- deactivating the check phase at ~~a programmed date~~ or after a programmed delay,
- specifying an absolute date ~~(or a delay) starting from~~ in which ~~(or after which)~~ the check phase is activated or deactivated,
- cancelling said programmed date or said programmed delay.

4. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the operator also transmits a signal to the reception equipment (2) containing a message to delete the list of identifiers memorised in the reception equipment (2).

5. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the operator also transmits ~~a signal~~ to the external security module (6, 8) a signal containing a message to delete the list of identifiers memorized in this external security module

(6, 8).

6. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the operator transmits the list of M identifiers of the external security modules (6, 8) to a reception equipment (2) through an EMM message specific to said reception equipment (2).

7. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the operator transmits the list of identifiers of N reception equipment (2) to an external security module (6, 8) through an EMM message specific to said external security module (6, 8).

8. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the operator transmits the list of M identifiers of external security modules (6, 8) to a group of reception equipment (2) ~~through an~~ through an EMM message specific to said group of reception equipment (2).

9. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the operator transmits the list of identifiers of N reception equipment (2) to a group of external security modules (6, 8) through an EMM message specific to said group of external security modules (6, 8).

10. (currently amended) Method set forth in claim 3 or 4, ~~characterised~~ characterized in that the operator supplies said signal message to a reception equipment (2) through an EMM message specific to said reception equipment (2).

11. (currently amended) Method set forth in claim 3 or 4, ~~characterised~~ characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

12. (currently amended) Method set forth in claim 5, ~~characterised~~ characterized in

that the operator supplies said signal message to an external security module through an EMM message specific to said external security module (2).

13. (currently amended) Method set forth in claim 5, ~~characterised~~ characterized in that the operator supplies said signal message to a group of external security modules (6, 8) through an EMM message specific to said group of external security modules (6, 8).

14. (currently amended) Method set forth in claim 3 or 4, ~~characterised~~ characterized in the operator transmits a signal message for the check phase to a group of reception equipment (2) in a private flow ~~for the check phase~~, said private flow being processed by a dedicated software executable in each reception equipment (2) as a function of the identifier of said reception equipment (2).

15. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the list of identifiers of external security module (6, 8) is transmitted in a private flow to a group of reception equipment (2) and processed by a dedicated software executable in each reception equipment (2) as a function of the identifier of said reception equipment (2).

16. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the list of identifiers of reception equipment (2) is transmitted to a group of external security modules (6, 8) in a private flow that is processed by a dedicated software in each of said external security modules (6, 8) or in the reception equipment (2) to which each of said external security modules (6, 8) is connected, as a function of the identifier of said external security module (6, 8).

17. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that digital data are distributed in plain text or in scrambled form.

18. (currently amended) Method set forth in claim 17, ~~characterised~~ characterized in that digital data are audiovisual programs.

19. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the list of identifiers of M security modules memorized in a reception equipment (2) is encrypted.

20. (currently amended) Method set forth in claim 1, ~~characterised~~ characterized in that the list of identifiers of N reception equipment (2) memorised in an external security module (6, 8) is encrypted.

21. (currently amended) Method set forth in one of claims 6 to 9, 12 and 13, ~~characterised~~ characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

22. (currently amended) Method set forth in claims 6, 7, ~~40~~ or 12, ~~characterised~~ characterized in that said EMM is in the following format:

```
EMM-U section() [ [ ]
table_id = 0x88                8 bits
section_syntax_indicator = 0   1 bit
DVB_reserved                   1 bit
ISO reserved                   2 bits
EMM-U_section_length           12 bits
unique_address_field            40 bits
for (i=0; i<N; i++) [ [ ]
    EMM_data_byte               8 bits
```

23. (currently amended) Method set forth in claims 8, 9, 44 or 13, characterised characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

```

EMM-G_section() [ ]
table_id = 0x8A or 0x8B      8 bits
section_syntax_indicator = 0  1 bit
DVB reserved                 1 bit
ISO reserved                  2 bits
EMM-G_section_length         12 bits
for (i=0; i<N; i++) [ ]
                                EMM_data_byte      8 bits

```

24. (currently amended) Method set forth in claims 8, 9, 44 or 13, characterised characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

```

EMM-S_section() [ ]
table_id = 0x8E              8 bits
section_syntax_indicator = 0  1 bit
DVB_reserved                 1 bit
ISO_reserved                  2 bits
EMM-S_section_length         12 bits
shared_address_field          24 bits
reserved                      6 bits
data_format                   1 bit

```

ADF\_scrambling\_flag 1 bit

for (i=0; i<N; i++) [ [ ]

EMM\_data\_byte 8 bits

25. (currently amended) Method set forth in any one of claims 1 to 24 20  
~~characterised~~ characterized in that the reception equipment (2) includes a decoder and the  
external security module (6, 8) includes an access control card (6) in which information about  
access rights of a subscriber to digital data distributed by an operator is memorised, and in that  
matching is done between said decoder and said card (6).

26. (currently amended) Method set forth in any one of claims 1 to 24 20,  
~~characterised~~ characterized in that the reception equipment (2) includes a decoder and the  
external security module (6, 8) includes a removable security interface (8) provided with a non-  
volatile memory and designed to cooperate firstly with the decoder, and secondly with a plurality  
of conditional access control cards (6) to manage access to digital data distributed by an  
operator, and in that, said matching is done between said decoder and said removable security  
interface (8).

27. (currently amended) Method set forth in any one of claims 1 to 24 20  
~~characterised~~ characterized in that the reception equipment (2) includes a decoder provided  
with a removable security interface (8) with a non-volatile memory and designed to ~~cooperate~~  
co-operate firstly with said decoder, and secondly with a plurality of conditional access control  
cards (6) and in that, said matching is done between said removable security interface (8) and  
said access control cards (6).

28. (currently amended) Reception equipment that can be matched with a plurality  
of external security modules (6, 8) to manage access to digital data distributed by an operator,

~~characterised~~ characterized in that it includes:

- a non-volatile memory designed to memorise a list of external security modules (6, 8),
- means of verifying if the identifier of an external security module (6, 8) connected to said equipment is present in the list memorised in said non volatile memory.

29. (currently amended) Equipment set forth in claim 28, ~~characterised~~ characterized in that the equipment includes a decoder and in that the external security module (6, 8) is an access control card (6) containing information about access rights of a subscriber to said digital data, matching being done between said decoder and said card (6).

30. (currently amended) Equipment set forth in claim 28, ~~characterised~~ characterized in that the equipment includes a decoder and in that the external security module (6, 8) is a removable security interface (8) provided with a non-volatile memory and designed to cooperate firstly with said decoder, and secondly with a plurality of conditional access control cards (6), to manage access to said digital data, said matching being done between said decoder and said removable security interface (8).

31. (currently amended) Equipment set forth in claim 28, ~~characterised~~ characterized in that the equipment includes a decoder provided with a removable security interface (8) with a non-volatile memory and designed to cooperate firstly with said decoder, and secondly with a plurality of conditional access control cards (6) and in that matching is done between said removable security interface (8) and said access control cards (6).

32. (currently amended) Decoder that can cooperate with a plurality of external security modules (6, 8) to manage access to audiovisual programs distributed by an operator, each external security module (6, 8) having a single identifier and comprising at least one data processing algorithm, decoder ~~characterised~~ characterized in that it includes:



- a non-volatile memory designed to memorise a list of external security modules (6, 8),
- means of verifying if the identifier of an external security module (6, 8) connected to said decoder is present in the list memorised in said non volatile memory.

33. (currently amended) Decoder set forth in claim 32, ~~characterised~~ characterized in that said external security modules (6, 8) are access control cards (6) in which information about access rights of a subscriber to digital data distributed by an operator is memorised.

34. (currently amended) Decoder set forth in claim 32, ~~characterised~~ characterized in that said external security modules (6, 8) are removable security interfaces (8) including a non volatile memory and designed to cooperate firstly with the decoder, and secondly with a plurality of conditional access control cards (6) to manage access to digital data distributed by an operator.

35. (currently amended) Removable security interface designed to cooperate firstly with a reception equipment (2), and secondly with a plurality of conditional access control cards (6), to manage access to digital data distributed by an operator, each card having a unique identifier and containing information about access rights of a subscriber to said digital data, interface ~~characterised~~ characterized in that it includes:

- a non-volatile memory designed to memorise a list of subscriber cards,
- means of verifying if the identifier of a card associated with said interface is present in the list memorised in said non-volatile memory.

36. (currently amended) Interface set forth in claim 35 ~~characterised~~ characterized in that it consists of a PCMCIA card containing a digital data descrambling software.

37. (currently amended) Interface set forth in claim 35 ~~characterised~~ characterized in that it consists of a software.

38. (currently amended) Access control system including a plurality of reception equipment (2) each having a unique identifier and that can cooperate with a plurality of external security modules (6, 8) each having a unique identifier, each external security module (6, 8) containing information about access rights of a subscriber to digital data distributed by an operator, said system also including a commercial management platform (1) communicating with said reception equipment (2) and said external security modules (6, 8), ~~characterised~~ characterized in that it also includes:

- a first module arranged in said commercial platform (1) and designed to generate matching queries,
- and a second module arranged in said reception equipment (2) and in said external security modules (6, 8) and designed to process said queries to prepare a matching configuration.

39. (currently amended) Computer program stored in memory executable on N reception equipment (2) that can cooperate with M security modules (6, 8 6) each having a unique identifier and in which information about access rights of a subscriber to digital data distributed by an operator are stored, ~~characterised~~ characterized in that it comprises instructions for memorising a list of identifiers of part or all of N reception equipment (2) in each external security module (6, 8), and instructions to memorise a list of identifiers of part or all of the M external security modules (6, 8) in each reception equipment (2), instructions to control the identifier of a security module connected to a reception equipment (2) and the identifier of said reception equipment (2), and instructions to prevent access to said data if the identifier of the security module (6, 8) connected to the reception equipment (2) is not present in the list of identifiers previously memorised in this reception equipment (2) or if the identifier of said reception equipment (2) is not present in the list of identifiers previously memorised in said external security module (6, 8).

40. (new) Method as set forth in claim 21, further characterized in that the operator supplies said signal message to a reception equipment (2) through an EMM message specific to said reception equipment (2).

41. (new) Method as set forth in claim 21, further characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

42. (new) Method as set forth in claim 22, further characterized in that the operator supplies said signal message to a reception equipment (2) through an EMM message specific to said reception equipment (2).

43. (new) Method as set forth in claim 23, further characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

44. (new) Method as set forth in claim 24, further characterized in that the operator supplies said signal message to a group of reception equipment (2) through an EMM message specific to said group of reception equipment (2).

45. (new) Method as set forth in claim 25, further characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

46. (new) Method as set forth in claim 25, characterized in that said EMM is in the following format:

EMM-U section()

table\_id = 0x88 8 bits

section\_syntax\_indicator = 0 1 bit

DVB_reserved	1 bit
ISO reserved	2 bits
EMM-U_section_length	12 bits
unique_address_field	40 bits
for (i=0; i<N; i++)	
EMM_data_byte	8 bits

47. (new) Method as set forth in claim 25, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

EMM-G_section()	
table_id = 0x8A or 0x8B	8 bits
section_syntax_indicator = 0	1 bit
DVB reserved	1 bit
ISO reserved	2 bits
EMM-G_section_length	12 bits
for (i=0; i<N; i++)	
EMM_data_byte	8 bits

48. (new) Method as set forth in claim 25, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

EMM-S_section()	
table_id = 0x8E	8 bits
section_syntax_indicator = 0	1 bit
DVB_reserved	1 bit

ISO_reserved	2 bits
EMM-S_section_length	12 bits
shared_address_field	24 bits
reserved	6 bits
data_format	1 bit
ADF_scrambling_flag	1 bit
for (i=0; i<N; i++)	
EMM_data_byte	8 bits

49. (new) Method as set forth in claim 26, characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

50. (new) Method as set forth in claim 49, characterized in that said EMM is in the following format:

EMM-U section()	
table_id = 0x88	8 bits
section_syntax_indicator = 0	1 bit
DVB_reserved	1 bit
ISO reserved	2 bits
EMM-U_section_length	12 bits
unique_address_field	40 bits
for (i=0; i<N; i++)	
EMM_data_byte	8 bits

51. (new) Method as set forth in claim 49, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the

following format:

```
EMM-G_section()
table_id = 0x8A or 0x8B      8 bits
section_syntax_indicator = 0  1 bit
DVB reserved                 1 bit
ISO reserved                  2 bits
EMM-G_section_length         12 bits
for (i=0; i<N; i++)
    EMM_data_byte            8 bits
```

52. (new) Method as set forth in claim 49, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

```
EMM-S_section()
table_id = 0x8E              8 bits
section_syntax_indicator = 0  1 bit
DVB_reserved                 1 bit
ISO_reserved                  2 bits
EMM-S_section_length         12 bits
shared_address_field          24 bits
reserved                      6 bits
data_format                   1 bit
ADF_scrambling_flag           1 bit
for (i=0; i<N; i++)
    EMM_data_byte            8 bits
```

53. (new) Method as set forth in claim 27, characterized in that the method also includes a mechanism designed to prevent use of an EMM transmitted to the same external security module (6, 8) or to the same reception equipment (2).

54. (new) Method as set forth in claim 27, characterized in that said EMM is in the following format:

```
EMM-U section()  
table_id = 0x88                8 bits  
section_syntax_indicator = 0    1 bit  
DVB_reserved                   1 bit  
ISO reserved                   2 bits  
EMM-U_section_length           12 bits  
unique_address_field           40 bits  
for (i=0; i<N; i++)  
    EMM_data_byte              8 bits
```

55. (new) Method as set forth in claim 27, characterized in that said EMM message concerns all external security modules (6, 8) or all reception equipment (2) and is in the following format:

```
EMM-G_section()  
table_id = 0x8A or 0x8B        8 bits  
section_syntax_indicator = 0    1 bit  
DVB reserved                   1 bit  
ISO reserved                   2 bits  
EMM-G_section_length           12 bits  
for (i=0; i<N; i++)  
    EMM_data_byte              8 bits
```

56. (new) Method as set forth in claim 27, characterized in that said EMM message is specific to a sub-group of external security modules (6, 8) or a sub-group of reception equipment (2) and is in the following format:

```

EMM-S_section()
table_id = 0x8E                8 bits
section_syntax_indicator = 0    1 bit
DVB_reserved                   1 bit
ISO_reserved                   2 bits
EMM-S_section_length           12 bits
shared_address_field           24 bits
reserved                       6 bits
data_format                    1 bit
ADF_scrambling_flag            1 bit
for (i=0; i<N; i++)
    EMM_data_byte              8 bits

```